

INFORMATION NEEDS (4.19.05 group discussion-NOT A CONSENSUS PRODUCT)
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Common categories of information needs:

- **Source Information**
- **Baseline Marine Mammal Info**
- **Effects**
- **Mitigation**
- **Process recommendations to facilitate research**
- **Research and Mitigation Enabling Methodologies (tools needed)**

Source Information

- Ambient levels
- Source characteristics
- Spatial and temporal distributions and source “hotspots”
- Propagation
- Alternate source technology (see mitigation info needs)

Baseline Marine Mammal Information

- Stock Structure
- Abundance
- Spatial and temporal distribution (“cold spots” and “hot spots”)
- Habitat use
- Behavior
- Anatomy
- Physiology
- Life history (*e.g.*, age-specific reproduction and mortality)
- Auditory sensitivity (more individuals of more species)

Effects

- Behavioral impacts
- Physiological and direct physical impacts (auditory and non-auditory)
- Analysis of strandings and deaths at sea
- Biological significance of behavioral effects
- Exposure thresholds (for hearing, behavioral and physiological effects)
- Thresholds for different levels of risk (MMPA)

Mitigation

- Alternate source technology
- Source level reduction
- Monitoring to ensure detection of strandings and deaths at sea
- Standardized systematic data collection before/during/after exposure events; and analysis made available to the public
- Effectiveness of mitigation
- Risk assessment methods
- Practical mitigation methods

Process recommendations to facilitate researchs

- Diversify funding
- Encourage cooperation among funding entities (e.g., partnerships like NOPP)
- Establish a streamlined statutory and regulatory framework that protects animals while removing obstacles to research needed for conservation

Research and Mitigation Enabling Methodologies (tools needed)

- Auditory modeling and measurement
- Animal tracking
- Standardized systematic data collection from all existing platforms
- [CEEs]

Next Steps

- populate with existing recommendations
- develop criteria for prioritizing research/information gathering